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REMARKS

Claims 1-3, 5-11 and 29, as amended, remain herein.

This Preliminary Amendment is responsive to the final Office Action mailed July 23, 2003.

Applicants' representative Robert N. Wieland thanks Examiner Vinh T. Luong for granting a personal interview on November 20, 2003. That interview is summarized in an Interview Summary of the same date, stating that the Examiner agreed that the words "the locking means being in releasable locking engagement with the first external surface of the piston" overcome the rejection based on Camp '372. However, the Examiner further states that such amendment raises new issues.

Applicants appreciate the statements in the July 23, 2003 Office Action that claims 3 and 5-11 would be allowable if rewritten in independent form including all of the limitations of the independent claim(s) from which they depend, and to overcome the rejection under 35 U.S.C. §112, second paragraph. Allowable claim 3 has been amended to recite all of the limitations of claims 1 and 2, thereby making claim 3 allowable. Claims 5-11, which depend from claim 3, also are allowable.

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Claim 1 has been amended to conform recitation to "first and second mechanical elements" and to remove the phrase "capable of." Claim 1 has been amended to recite the locking means being "in releasable locking engagement" with the first external surface of the piston. See the specification at page 10, lines 4-5, describing locking means in the form of tips 15 being separated by the explosive charge, resulting in spreading of tips 15 for disengagement with their mating cylindrical seat 22.

Claim 1 also has been amended to recite "unitary movement of said first and second mechanical elements." See the specification at page 9, line 37, to page 10, line 3, describing tube 10 and hub 11 in integral translation with one another due to the locking means formed by tips 15 integral with tube 10 and co-operating with matching conical profile 19 on hub 11.

The specification at page 8, paragraph 7, beginning with "Each tip 15" has been amended to recite "a conical profile 18 that co-operates with a groove 19a." See discussion below herein.

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1. The originally filed Abstract is amended herein, according to current rules.

2. An Information Disclosure Statement accompanied by a copy of German Patent DE 195 15 852 is filed herewith.

3. Objections were stated to the drawings. Submitted herewith are copies of Figs. 2, 3 and 9 revised to replace Figs. 2, 3 and 9, with the following remarks stated in the sequence of the numbered paragraphs in the Office Action.

Fig. 2 is a revised sectional view shown as II-II in Fig. 3. Note that in Fig. 2 the new sectional view II-II now excludes an upper sectional portion of slit 16 (thereby resulting in a fully hatched view of tip 15) and includes a lower sectional portion of slit 16 (thereby resulting in a partially hatched tip 15 and reveals the non-hatched view of a portion of slit 16).

Fig. 2 also has been revised to show section symbols "III-III."

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Fig. 3 has been revised to show section symbols "II-II" representing the revised section excluding the upper sectional portion of slit 16 and including the lower sectional portion of slit 16, as discussed herein in connection with Fig. 2.

Fig. 9 has been revised to add missing reference symbols 27 ("chamber"), 33 ("rib") and 33a ("circular groove" matching rib 33).

Fig. 9 has further been revised to show no hatching of groove 19(a).

Contrary to the Office Action, groove 19a is not new matter, because the originally filed specification at page 8, lines 24-26, described "conical external profile 18 that co-operates with a groove having a matching profile 19." Originally filed Figs. 1 and 4 show reference element 19 associated with such structure. Applicants' have herein clarified the description in the specification and drawings by applying label "19a" to the groove itself, thereby distinguishing groove 19a from its matching profile 19, which is complementary to the matching profile 18 of tip 15. Profile 19 is shown in Fig. 2 attached hereto and groove 19a is shown in Fig. 9 attached hereto. As originally filed, both the groove and the matching profile were originally disclosed,

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and therefore such mere numbering for clarification does not constitute new matter.

Paragraph numbered 7(b) (2) in the Office Action refers to an "un-numbered rib" shown in the Examiner's sketch accompanying the Office Action. Actually, there is no such second rib, but instead, the structure identified in the Office Action sketch is a matching circular groove 33a, which is part of tip 15, and is complementary to rib 33, as described in the specification, as filed, at page 9, lines 31-35. The Amendment filed May 14, 2003, amended the specification at page 9, line 33, to apply reference numeral "33a" to the groove, thereby distinguishing groove 33a from rib 33. Thus, the original groove and rib were originally disclosed structures, and such mere numbering for clarification does not constitute new matter.

Paragraph numbered 7(b) (3) in the Office Action suggests that curved profile of chamber 27 allegedly is new matter. Actually, Fig. 9 shows the embodiment shown in Fig. 2 in a disengaged position, and thereby reveals the full profile of chamber 27 defined by the curved profile of tips 15. Tips 15 have a length and flexible, bendable profile ("deformable

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tips") described in the specification, as originally filed, at page 8, lines 20-23:

The end of the tube 10 that is in the vicinity of the seat 12 incorporates four tips 15 separated by slits 16. The slits 16 are of a length selected so as to give the tips 15 a certain bending flexibility.

At page 10, lines 28-32:

The diameter of this second seat is less than that of the first seat 22 and is selected small enough for the radial deformation of the tips 15 to continue until their conical external profile 18 is disengaged from its matching housing 19.

And page 11, lines 8-12:

It is easy for the person skilled in the art to dimension the tips 15 according to the force required to cause separation. It is possible to act upon:

- the depth of the grooves 16, deep grooves providing increased flexibility.

Thus, the originally filed disclosure fully described the curved profile of chamber 27, which is the corresponding profile of tips 15, and is now illustrated in new Fig. 9, showing the curved profile of tips 15 in the disengaged position, i.e., the same structure is shown in engaged and disengaged positions, thereby revealing the full profile of originally disclosed chamber 27 defined by the curved profile of tips 15. Fig. 9 merely shows a different view of

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originally disclosed structure, and therefore does not constitute new matter.

Paragraphs numbered 7(c) and 8(a) in the Office Action states an objection to the sectional plane in Fig. 2. Fig. 2 has been revised to show sectional numeral "III-III" and Fig. 3 has been revised to show sectional numeral "II-II."

Paragraph numbered 8(b) in the Office Action states an objection to the groove located in axial bore 20 as not being designated by a reference numeral. Fig. 9 has been revised to show groove 19a, with full support in the original disclosure, as discussed herein.

Paragraph numbered 9 in the Office Action states an objection to the original drawings as allegedly not showing external profile 18 disengaged from matching profile 19. Enclosed revised Fig. 9 shows external profile 18 disengaged from matching profile 19; attention is drawn to Fig. 9 showing entire tip 15 shifted to the right, as compared with the position of tip 15 shown in Fig. 2. Thus, the Figures show the engaged elements recited in claim 1 and the disengaged elements recited in claim 7.

Paragraph numbered 9 further states an objection to drawings allegedly not showing the groove located in the

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surface of axial bore 20, recited in claim 10. Actually, such groove is groove 33a, which is shown in Fig. 2 and has full support in the original disclosure, as discussed herein.

Paragraph numbered 9 (last paragraph on page 4 of the Office Action) further states an objection to the drawings as not showing both engaged and disengaged positions of profiles 18 and 19. Fig. 2 shows engaged positions of profiles 18 and 19, and Fig. 9 shows disengaged positions of profiles 18 and 19, as discussed herein.

Paragraph numbered 9 (first paragraph on page 5 of the Office Action) further states an objection to Fig. 2 as allegedly showing groove 31 as not arranged on the cylindrical surface of internal bore 20. Actually, Fig. 2 shows the cylindrical surface of internal bore 20 as being the internal bore of the right-most portion of tips 15 (see hatched portion defining tips 15), i.e., Fig. 2 shows the cylindrical surface of internal bore 20 as extending from the right-most edge of tips 15 horizontally toward the left until bore 20 ends at the sectional symbol III-III. To the left of sectional symbol III-III, the internal bore of tips 15 extends outward, i.e., defines a groove 31. Thus, groove 31 is in tips 15. The specification at page 9, lines 25-27, describes groove 31 as

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being "between" (i.e., from right-to-left) bore 28 of chamber 27 (defined by the center portion of tips 15) and cylindrical surface 20 delimited by the right-most portion of tips 15. Groove 31 is in tips 15, just to the right of sectional symbol III-III, as shown in Fig. 2.

Thus, contrary to the Office Action, groove 31 is not arranged on the cylindrical surface of internal bore 20, but instead, is between bore 20 and bore 28, and formed in tips 15.

Withdrawal of the objections to the drawings and to the disclosure is respectfully requested.

4. Paragraph numbered 10 of the Office Action states an objection to items described in the Examiner's sketch accompanying the Office Action. Each of these items has been discussed in detail herein, and for the stated reasons, does not constitute new matter. In summary:

- reference numeral 27 has been added to define chamber 27, which is an originally disclosed feature, i.e., the chamber is inherent to the bore defined by the center portion of tips 15.

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- curved profile of chamber 27: Tips 15 have a flexible, bendable profile (deformable tips) described in the specification, as originally filed, at page 8, lines 20-23, and the radial deformation of tips 15 continue until their conical external profile 18 is disengaged from its matching housing 19. Thus, the originally filed disclosure fully describes the curved profile of chamber 27 when engaged and disengaged, which is the corresponding profile of bendable, deformable tips 15, and such original description is illustrated in Fig. 9, showing the curved profile of tips 15 in the disengaged position, and therefore does not constitute new matter.

- groove 19a is not new matter, because the originally filed specification at page 8, lines 24-26, described "conical external profile 18 that co-operates with a groove having a matching profile 19." Originally filed Figs. 1 and 4 show reference element 19 associated with such structure. Applicants' have herein clarified the description in the specification and drawings by applying label "19a" to the groove itself, thereby distinguishing groove 19a from its matching profile 19,

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and therefore illustration of groove 19a and profile 19a does not constitute new matter.

- an "un-numbered second rib": There is no such second rib, but instead, the structure identified in the Office Action sketch is a matching circular groove 33a, which is part of tip 15, and is complementary to rib 33, as described in the specification, as filed, at page 9, lines 31-35. The Amendment filed May 14, 2003, amended the specification at page 9, line 33, to apply reference numeral "33a" to the groove, thereby distinguishing groove 33a from rib 33. Thus, the original groove and rib were originally disclosed, and such mere numbering for clarification does not constitute new matter.

Thus, all elements shown in Fig. 9 are supported by disclosure in the original reference, wherein reference symbols have been added to clarify identification of such elements.

Withdrawal of the objection to the disclosure is respectfully requested.

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5. Paragraph numbered 11 of the Office Action states an objection to sectional reference symbols, which have been revised as described herein. Withdrawal of the objection to the disclosure is respectfully requested.

6. Claims 1-3, 5-11 and 29 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 1 has been amended to conform recitation to "first and second mechanical elements." Withdrawal of the rejection is respectfully requested.

7. Claims 1, 2 and 29 were rejected under 35 U.S.C. §102(b) over Camp German Patent DE 196 17 372.

The Office Action takes the position that Camp DE '372 allegedly discloses locking means 32,40 (such combination providing a linking force along a second axis), and that the Camp DE '372 piston 44 allegedly corresponds to applicants' retention means/piston. Further, the Examiner alleges that the Camp DE '372 piston 44 has a first external surface 48 corresponding to applicants' piston having a first external surface. However, the Camp DE '372 first external surface 48 slides

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along internal bore 32 and is not in "releasable locking engagement" with the locking means 32,40, as recited in proposed claim 1.

Also, the Office Action identifies on Exhibit II (attached to the Office Action) the end of the Camp DE '372 piston 44 as having a "second surface" that abuts a stopping surface of bore 32. However, such second surface should not be identified as corresponding to applicants' first external surface because, while such second surface releasably abuts against the stop, it does not lock with the stop, as required by applicants' claim 1.

Accordingly, Camp DE '372 piston 44 does not have an external surface (1) for sliding in a bore responsive to gas pressure, and (2) in locking engagement with such bore to ensure retention of the locking means in the locking position for unitary movement of the first and second mechanical elements, as recited in proposed claim 1. Any pressure on piston 44 results in piston 44 moving away from the stopping surface of bore 32, thereby not causing unitary movement of first and second mechanical elements.

For the foregoing reasons, Camp DE '372 fails to disclose all elements of applicants' claimed invention, and therefore

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is not a proper basis for rejection under §102. And, there is no disclosure or teaching in Camp DE '372 that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicants' presently claimed invention. Claims 2 and 29, which depend from claim 1, are allowable for the same reasons described herein for claim 1. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

All claims 1-3, 5-11 and 29 are now proper in form and patentably distinguished over all grounds of rejection cited in the Office Action. Accordingly, allowance of all claims 1-3, 5-11 and 29 is respectfully requested.


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Should the Examiner deem that any further action by the applicants would be desirable to place this application in even better condition for issue, the Examiner is requested to telephone applicants' undersigned representatives.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

November 24, 2003
Date

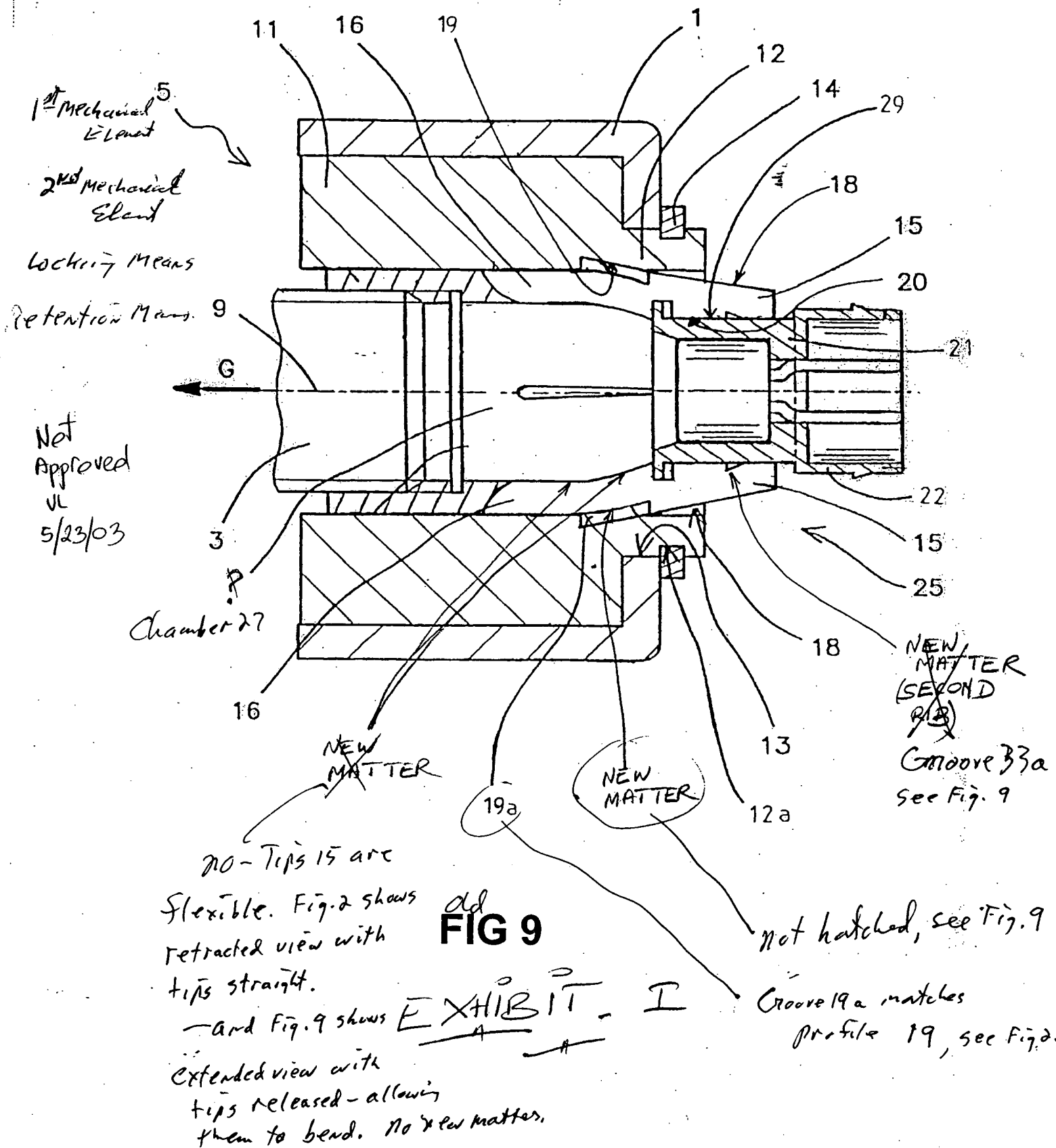

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Attachments: 3 annotated sheets - Figs. 2, 3 and 9
3 replacement sheets - Figs. 2, 3 and 9
Exhibits I and II

Attorney Docket No.: CELA:082

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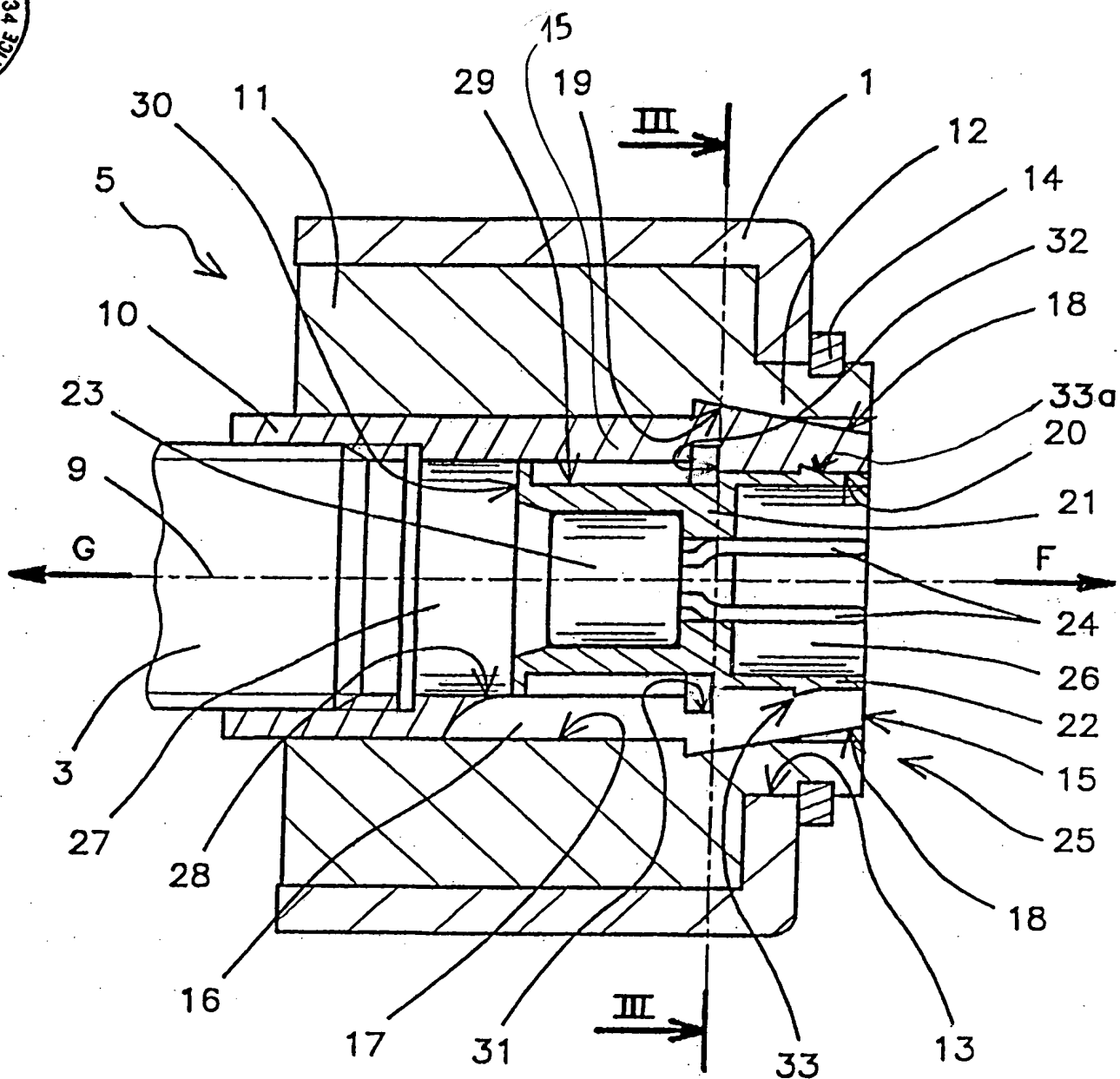


FIG 2

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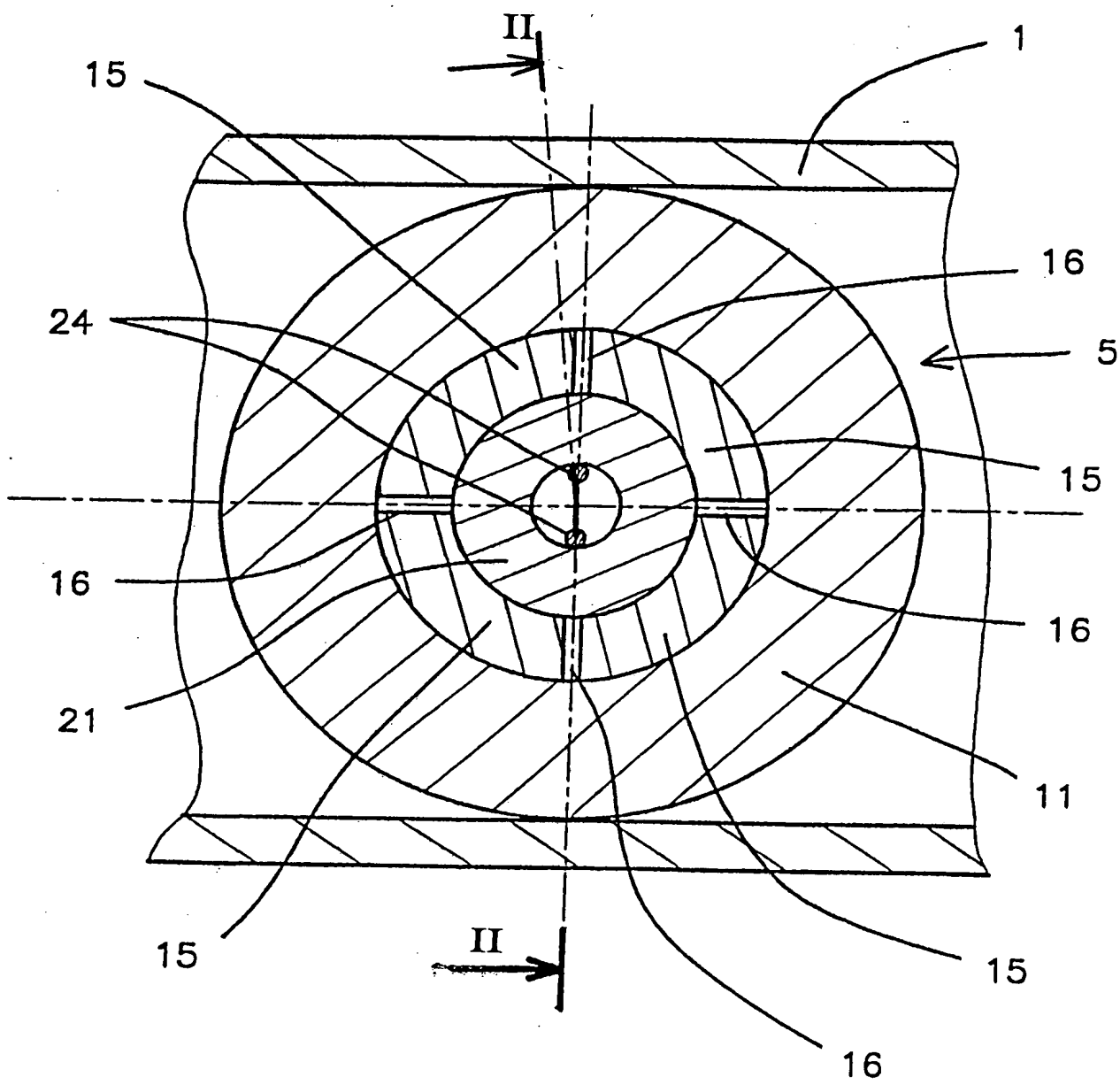
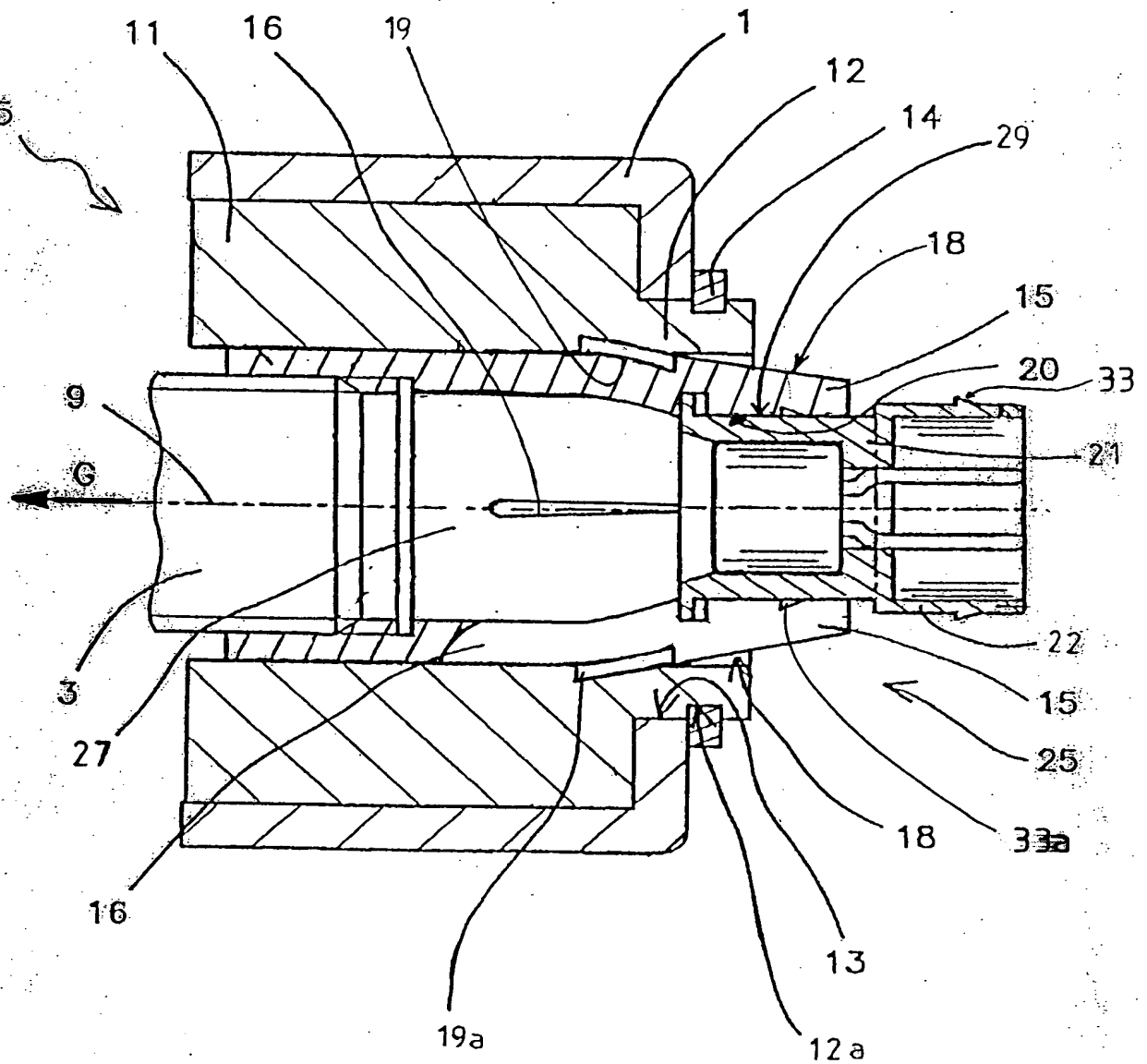


FIG 3



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FIG 9